THE AMENDMENT

In the Specification

At page 1, before the first paragraph starting with "The present invention", insert the heading:

TECHNICAL FIELD

At page 1, before the second paragraph starting with "The binding of biopolymers", insert the heading:

BACKGROUND OF THE INVENTION

At page 2, before the second full paragraph starting with "The object of", insert the heading:

SUMMARY OF THE INVENTION

At page 2, before the fourth full paragraph starting with "In particular", insert the heading:

DETAILED DESCRIPTION OF THE INVENTION

Amend the first full paragraph of page 5:

According to the invention any support or matrix common in this field can be used. They comprise in particular glass, sheets or films or membranes made of polypropylene, nylon, cellulose, cellulose derivatives (e.g. cellulose acetate, cellulose mixed ester), polyethersulfones, polyamides, polyvinyl chloride, polyvinylidene fluoride, polyester, ~~teflon~~ TEFLON® (synthetic resinous flouorine-containing polymers) or polyethylene.

Amend the third paragraph of page 5:

According to the invention an amine component is understood to mean monoamines, bis-amines or polyamines. Preferred monoamines are 2-aminoethanol, 6-amino-1-hexanol, 2-(4-

aminophenyl)ethanol, 5-amino-n-valeric acid, 2-(2-aminoethyoxy)ethanol, 3-amino-1,2-propanediol; preferred bis-amines are 1,4-bis(3-aminopropoxy)butane, O,O'-bis(2-aminopropyl)polyethylene glycol 500 (= ~~Jeffamine~~ JEFFAMINE® 500), O,O'-bis(2-aminopropyl)polyethylene glycol 130 (= Jeffamine 130), 4,7,10-trioxa-1,13-triadecaneamine, ethylene diamine, N-methylimidazole, diisopropylethylamine; and preferred polyamine are tetraethylene pentamine, spermine, spermidine, 4,7,10-trioxa-1,13-tridecane diamine, 4-aminomethyl-1,8-octane diamine. By incorporating amines preferably positive charges can be implemented into the linker system, since they are present in protonated condition within the physiological region. The degree of the surface charge can be controlled by selecting the corresponding amine. Positive charges effect an easier approach of negatively charged biopolymers (e.g. nucleic acids) and thus facilitate hybridizations on the support surfaces treated according to the invention. The use of bis-amines or polyamines serves for controlling the chain length, i.e. the length of the linker system, by the length of the amine and the number of repeated passing through the below synthesis principles. By selecting the amine it is possible to control the individual character of the linker system, i.e. whether it is rather hydrophobic or hydrophilic. By selecting the amine, other functional groups (e.g. hydroxyl, phosphate, carboxyl, carbonyl groups) may, of course, also be presented on the surface in addition to amine groupings. For example, it is advantageous for introducing a linker carrying OH groups to carry out the reaction with an amine alcohol. When a bifunctional amine is used, the chain is extended linearly. Branchings are incorporated into the linker system by polyfunctional amine reagents. As a result, what is called dendrimer structures are built up (see figures 1 and 2). According to the invention a dendrimer structure means that structures result which start from a defined starting point and have more than one branches. The advantage of this is above all that in the case of support materials with otherwise low charging capacity (e.g. glass) the charging can be increased in well-calculated manner and thus greater amounts of biopolymers can be applied. When polyfunctional amines (m = number of the amino functions) are used, x positions (functions) may be utilized for a binding of biopolymers after n rounds (1 round = cycle from activation and reaction with amine):